

REMARKS

Claims

Claims 1-6 and 8-36 were pending in the application. In the Office Action dated December 24, 2008, the Examiner rejected claims 1-6, 8-28 and 30-35 and claims 29 and 36 were objected to. In the present amendment, independent claims 1, 20 and 30 have been amended and claim 10 has been deleted. As such, claims 1-6, 8, 9 and 11-36 remain pending in the application. Basis for the amendments can be found in the specification and no new matter has been added.

Claim Objections

On page 2 of the Office Action, the Examiner objected to claim 1 submitting that the projection (15) extends beyond the perimeter portion of the panel rather than the walls and that the recessed section extends along at least one perimeter portion of the panel rather than the walls. Claim 1 has been amended in this regard as the Examiner suggested as shown in the amendments. Respectfully, the Examiner's claim objection has been traversed. Independent claims 20 and 30 have been amended in the same manner for consistency and correctness.

Claim Rejections – 35 USC § 112

On page 2 of the Office Action, the Examiner rejected claim 1 on the ground that there was insufficient basis in the description of the specification for the limitation “one-piece” in claim 1. Claim 1 has been amended to delete the limitation “one-piece” and the Examiner's rejection is respectfully traversed. The limitation “one-piece” has also been deleted from independent claims 20 and 30 for consistency and correctness.

Claim Rejections – 35 USC § 103

On pages 2-5 of the Office Action, claims 1 and 3 were rejected under 35 USC 103(a) as being unpatentable over Chinese Utility Model Patent CN 2197409Y in view of Chinese Patent CN 2368912Y. The rejection is respectfully traversed.

Claim 1 has been amended to limit the building panel of the present invention to a “formed, rigid” building panel. Basis for the limitation of the building panel being “formed” can be found in the specification as filed, for example, in the paragraph spanning pages 12 and 13 and in the paragraph spanning pages 19 and 20. Numerous other references can be found in the specification to features of the building panel of the present invention being “formed”. Basis for the limitation of the building panel being “rigid” can be found, for example, in former claim 10. This amendment has also been made to independent claims 20 and 30 for consistency and to clearly distinguish over the prior art of record.

The formed building panel of claim 1 is clearly distinguished from CN2197409Y because this document discloses steel formwork that is welded together from separate components including a trough-shaped panel (1), side frames (2) and stiffeners (6).

The formed building panel of claim 1 is also clearly distinguished from CN2368912Y, which discloses formwork assembled from a combination of a steel frame (1) and a plastic panel (skin) (2).

The building panel of the present invention is formed as a single unit rather than assembled from separate components. A person having ordinary skill in the art would recognize that the building panel as claimed in claim 1 was limited to such a building panel and would not consider the assembled formwork disclosed in CN2197409Y and CN2368912Y to be formed building panels.

Claim 1 has also been amended to recite “wherein said building panel forms a structural part of a finished structure built using the building panel.” Basis for this limitation can be found in the specification as filed, for example, on pages 12-15 and page 18 and the associated figures and in the last paragraph on page 20. Similar amendments have also been made to independent claims 20 and 30 for consistency and to clearly distinguish over the prior art of record.

Respectfully, an important distinction between the building panel of the present invention and the disclosures of CN2197409Y and CN2368912Y is that neither CN2197409Y nor CN2368912Y disclose building panels that form a structural part of a finished structure built using the building panel, as claimed in amended claim 1. In sharp contrast, CN2197409Y and CN2368912Y both disclose formwork, which are not building

panels, and the formwork does not form any part of the finished structure at all nor is it intended to. This will be elucidated below.

The fully pressure rolled wide combined steel formwork of CN2197409Y is used for “cast cement engineering” as stated at the top of page 1 of the English translation of CN2197409Y. The second paragraph on page 1 of the English translation of CN2197409Y identifies problems of the prior art formwork, such as “...it requires a large effort to disassemble. The cost associated with disassembly is high and the speed for turn around use is slow.”. The third paragraph on page 1 of the English translation of CN2197409Y states that “The present utility model is directed to the aforementioned issues with the prior art.”. Hence, the fully pressure rolled wide combined steel formwork of CN2197409Y is re-used and clearly does not form any part of a finished structure built using the formwork.

The assembled steel-plastic formwork of CN2368912Y is also designed to be re-used. For example, the second paragraph on page 5 of the English translation of CN2368912Y states that the benefits of ...the present invention are “1. Very light and easy to remove....4. ...no edge lines on the walls after removing the mold.” Hence, the assembled steel-plastic formwork of CN2368912Y does not form any part of a finished structure built using the formwork. Indeed, the formwork itself of CN2368912Y is designed to be dismantled. The fifth paragraph on page 3 and the fourth paragraph on page 6 of the English translation of CN2368912Y state that “The connecting bolts are used [to] for a detachable connection between the steel framework and [the] plastic panels.”. This is in stark contrast to the formed building panel of the present invention, which is unitary, is not designed to be dismantled and which forms a structural part of the finished structure.

It is respectfully submitted that even if it would have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y and CN2368912Y, the skilled addressee would merely arrive at a type of re-useable formwork and not the building panel of the present invention, which forms part of the finished structure built using the building panel.

It is further submitted that it would not have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y and CN2368912Y. As stated above, CN2197409Y discloses fully pressure rolled wide combined steel formwork comprising a trough-shaped panel (1), side frames (2) and stiffeners (6) that are welded together. In sharp contrast, CN2368912Y discloses formwork comprising a combination of a steel framework (1) including sideframes (5), horizontal supporting panels (6), a lengthwise supporting panel

(7) and a plastic panel (skin) (2), which are bolted together with connecting bolts (4). Clearly, the two different types of formwork disclosed in CN2197409Y and CN2368912Y have different features, use different materials and use different construction techniques to assemble the constituent parts.

Reference is made to the factual inquiries set forth in *Graham v John Deere Co.*, 383 US 1, 148 USPQ 459 (1966) recited by the Examiner in the previous Office action dated March 13, 2008 and in particular to the summarized points 1 and 2 directed, respectively, to determining the scope and contents of the prior art and ascertaining the differences between the prior art and the claims at issue. Respectfully, it should now be apparent to the Examiner that in light of the aforementioned important technical differences between the formwork of CN2197409Y and the formwork of CN2368912Y, it would not have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y and CN2368912Y.

Nonetheless, as stated above, even if the teachings of CN2197409Y and CN2368912Y were combined, one of ordinary skill in the art would not arrive at the formed building panel which forms a structural part of the finished structure as claimed in claim 1. The building panel as claimed in claim 1 is not the predictable result of combining CN2197409Y and CN2368912Y because such a combination would not and could not yield the building panel of claim 1. Therefore, the building panel as claimed in claim 1 is nonobvious over CN2197409Y in light of CN2368912Y.

The aforementioned arguments apply equally to independent claims 20 and 30 and therefore, the methods of constructing a building structure as claimed in claims 20 and 30 are nonobvious over CN2197409Y in light of CN2368912Y. Furthermore, claims 2-6, 8-19, 21-29 and 31-36 which depend from respective independent claims 1, 20 and 30 are also nonobvious over CN2197409Y in light of CN2368912Y.

On pages 5-9 of the Office Action, the Examiner rejected claims 1-6, 8-23, 25, 28 and 35 under 35 USC 103(a) as being unpatentable over Chinese Utility Model Patent CN 2197409Y in view of Scull (US 2,276,071). The rejection is respectfully traversed.

As detailed in the foregoing, CN 2197409Y fails to disclose, teach or suggest the combination of features recited in amended independent claim 1. In particular, CN 2197409Y merely discloses formwork and does not disclose a formed building panel. Furthermore, the formwork of CN 2197409Y does not form any part of the finished structure as claimed in independent claims 1, 20 and 30.

Scull merely discloses a fibre board panel for affixing to a wall. The first paragraph of Scull states that "The present invention relates to panels or boards of a character to serve as the sheathing or facing for walls, including ceilings and the like,...". Scull is therefore a wall covering rather than a building panel for constructing a wall. Clearly, the fibre board panels of Scull do not form a structural part of a finished structure, as claimed in independent claims 1, 20 and 30. Therefore, even if it would have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y and Scull, which we submit it would not have been, the combination would not and could not result in the present invention as claimed in independent claims 1, 20 and 30. Both CN2197409Y and Scull fail to disclose, teach or suggest a building panel which forms a structural part of a finished structure. Hence, the combination of CN2197409Y and Scull cannot render the present invention as claimed in independent claims 1, 20 and 30 obvious.

The aforementioned arguments in relation to the combination of CN2197409Y and Scull are equally applicable to dependent claims 2-6, 8-19, 21-23, 25, 28 and 35. Therefore, these dependent claims are also nonobvious over the combination of CN2197409Y and Scull.

On page 9 of the Office Action, the Examiner rejected claim 24 under 35 USC 103(a) as being unpatentable over Chinese Utility Model Patent CN 2197409Y in view of Scull (US 2,276,071) and further in view of CN2368912Y. The rejection is respectfully traversed.

Claim 24 depends on claim 20 and therefore shares the combination of features recited in claim 20. Respectfully, the foregoing clearly demonstrates that the combination of CN2197409Y and Scull does not, and cannot, result in the method of construction recited in claim 20, irrespective of whether the combination of CN2197409Y and Scull would have been obvious to one of ordinary skill in the art. Respectfully, the foregoing also clearly demonstrates that the combination of CN2197409Y and CN2368912Y does not, and cannot, result in the method of construction recited in claim 20, irrespective of whether the combination of CN2197409Y and CN2368912Y would have been obvious to one of ordinary skill in the art. Furthermore, the combination of CN2197409Y, Scull and CN2368912Y does not, and cannot, result in the method of construction recited in claim 24, irrespective of whether such a combination would have been obvious to one of ordinary skill in the art and irrespective of the feature being added by claim 24. The Applicant acknowledges that CN2368912Y discloses bolting formwork together. However, the formwork of CN2368912Y is not a building panel and does not form a structural part of a finished

structure. CN2197409Y, Scull and CN2368912Y fail individually and in combination to disclose, teach or suggest the method of construction recited in claim 24 wherein the building panel forms a structural part of a finished structure.

On pages 9 and 10 of the Office Action, claims 26, 27 and 32 were rejected under 35 USC 103(a) as being unpatentable over CN2197409Y in view of Scull and further in view of Bertsche (5,809,722). The rejection is respectfully traversed.

Claims 26 and 27 depend on claim 20 and therefore share the limitations thereof. Claim 32 depends on claim 30 and therefore shares the limitations thereof. With reference to the foregoing, it has been clearly demonstrated that claims 20 and 30 are nonobvious in light of the combination of CN2197409Y and Scull because, individually and in combination, CN2197409Y and Scull fail to disclose, teach or suggest the methods of construction recited in claims 20 and 30 wherein the building panel forms a structural part of a finished structure. Bertsche discloses a reinforced concrete slab supported on a girder structure. Shearing connectors (15) extend from beams (10, 11) of an underlying girder system through apertures (16) in wood decking (D). Reinforcing or load transfer members (30) extend through apertures (19) in side plates (18) of the shearing connectors (15) and are embedded in the concrete (27) of the slab. The Applicant agrees with the Examiner that Bertsche discloses routing rods (30) through aligned apertures in a wall (18) in a reinforced concrete system, as the Examiner states at the top of page 10 of the Office Action. However, a reinforced concrete system is not claimed by claims 26, 27 or 32. Claims 26 and 27 recite routing reinforcing members, conduits, pipes, tubes, rods or cables through aligned apertures in the walls of a building panel in which the walls form cells in the building panel, as recited in claim 20 upon which claims 26 and 27 depend and which comprise limitations of the method of claims 26 and 27. Similarly, claim 32 recites coupling two of the building panels of the present invention with reinforcing members where the building panel is as specified in claim 30. In contrast, Bertsche does not disclose, teach or suggest a building panel at all and does not disclose, teach or suggest the building panel or the methods of construction as claimed in claims 20 or 30. The extent of the disclosure, teaching or suggestion of Bertsche is to route reinforcing members through apertures (19) in side plates (18) of shearing connectors (15) comprising part of a girder system to relieve compressive stresses from a concrete slab (S). Combining this teaching with CN2197409Y and Scull falls short of the methods of construction recited in claims 26, 27 or 32. Hence, even if one of ordinary skill in the art

were to combine the teachings of CN2197409Y, Scull and Bertsche, they would not and could not arrive at the methods of construction as recited in claims 26, 27 or 32.

Furthermore, a reinforced concrete slab is not a formed building panel, nor is it formwork, the subject of CN2197409Y, nor is it a wall covering, the subject of Scull. Therefore, it is respectfully submitted that it would not have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y, Scull and Bertsche. From a technical standpoint, in an effort to reach the method of construction of claims 26, 27 or 32 using the formed building panel of the present invention, the removable formwork of CN2197409Y is completely incompatible with the permanent reinforced concrete slab and girder structure of Bertsche and the decorative panel of Scull is completely incompatible with Bertsche. Hence, claims 26, 27 and 32 are also nonobvious in light of the combination of CN2197409Y, Scull and Bertsche.

On page 10 of the Office Action, claim 34 was rejected under 35 USC 103(a) as being unpatentable over CN2197409Y in view of Scull and further in view of Azizinamini (6,871,462). The rejection is respectfully traversed.

Claim 34 depends on claim 1 and therefore shares the limitations thereof. With reference to the foregoing, it has been clearly demonstrated that claim 1 is nonobvious in light of the combination of CN2197409Y and Scull because individually and in combination CN2197409Y and Scull fail to disclose, teach or suggest the building panel recited in claim 1 wherein the building panel forms a structural part of a finished structure. The Applicant agrees with the Examiner that Azizinamini teaches the formation of U-shapes on the top of a wall in a reinforced concrete system. However, the wall in question in Azizinamini is a plate (12) welded to a structural member (14), such as an I-beam, and not a wall of a building panel as recited in claim 1 upon which claim 34 depends. Azizinamini has nothing to do with building panels and does not teach, disclose or suggest a building panel which forms a structural part of a finished structure. Therefore, the combination of Azizinamini with CN2197409Y and Scull would be nonobvious to one of ordinary skill in the art. Furthermore, the combination nevertheless clearly fails to result in the building panel of claim 34.

On pages 10 and 11 of the Office Action, claims 30-33 were rejected under 35 USC 102(b) as being anticipated over CN 2368912Y modified by Scull in view of Lu (US 5,092,093). However, it is respectfully submitted that such an anticipation objection is

improper in light of the combination of prior art documents. It is presumed the Examiner intended to raise an obviousness objection against claims 30-33 and intended to reject claims 30-33 under 35 USC 103(a) as being unpatentable over CN 2368912Y modified by Scull in view of Lu. Nonetheless, the rejection is respectfully traversed.

Claim 30 has been amended in a similar manner to claim 20 to limit the method of construction to a method in which the building panels form structural parts of a finished structure. Claims 31-33 depend on claim 30 and therefore share the same limitations.

With reference to the foregoing, it has been clearly demonstrated that claim 30 is nonobvious in light of the combination of CN2197409Y and Scull because both individually and in combination CN2197409Y and Scull fail to disclose, teach or suggest the method of construction recited in claim 30 wherein the building panels form structural parts of a finished structure.

At the bottom of page 10 of the Office Action, the Examiner states that Lu discloses coupling the building panels (2, 4) of Lu spaced apart with a reinforcing member (5). The Applicant acknowledges that Lu discloses joining the panels of Lu together in a spaced apart relationship, but feature (5) is in fact described in Lu as a spacer rather than a reinforcing member (see for example col. 2, lines 48-54). Furthermore, the panels of Lu comprise two opposed wire nets (210, 210'), which sandwich a cellular body made of stacked wavy metallic strips (211) as a reinforcement unit (21). The panels of Lu are yet another considerably different panel from any of the other prior art panels of record and considerably different from the building panel of the present invention as claimed. The contribution of Lu in relation to claims 30-33 is limited to the teaching of spacing apart two panels and filling the space in between with concrete. However, it is respectfully submitted that one of ordinary skill in the art would not combine the teachings of Lu with those of CN2197409Y and/or Scull. Such a combination would require the combination of the removable and reusable non-structural formwork of CN2197409Y with the wire net wall panels of Lu and the non-structural, fibre board, wall covering panels of Scull. It is respectfully submitted that such a combination is clearly technically incompatible and nonobvious to a person of ordinary skill in the art and to assert to the contrary is unsustainable. Hence, independent claim 30 and dependent claims 31-33 are nonobvious.

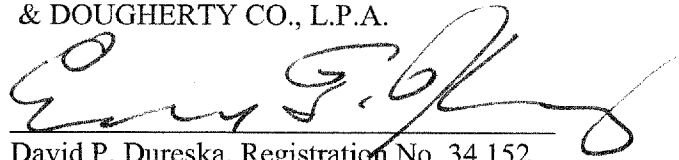
CONCLUSION

In conclusion, the specific combination of features recited in the amended independent claims 1, 20 and 30 are not disclosed, suggested or rendered obvious to one of ordinary skill in the art by the prior art of record irrespective of whether the prior art citations are considered alone or in any possible combination. Consequently, the claims dependent thereon are also not anticipated or rendered obvious by the prior art of record.

In light of the above submission, the applicant considers the rejections and objections to be traversed. Accordingly, it is respectfully submitted that the application is now in condition for allowance. Reconsideration and allowance of Claims 1-6, 8, 9 and 11-36 is courteously solicited.

Respectfully submitted,

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& DOUGHERTY CO., L.P.A.

A handwritten signature in black ink, appearing to read 'David P. Dureska', is written over a horizontal line.

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